Appendix A: IOU Savings Compared to CPUC Savings Goals

This appendix compares the energy savings reported by the IOUs and the evaluated energy savings achievements for the 2010-2012 program cycle with the energy savings goals adopted by the Commission in D.09-09-047. The following terms describe different metrics used by the Commission in establishing goals and defining savings impacts:

- **Goals**[1] - Energy savings targets established by the Commission for IOU programs in the 2010-2012 program cycle. These goals were set for the program cycle. The current goals are based on historic energy efficiency savings assumptions that were available from potential studies conducted at the time.
- **Projected Savings** – Energy savings proposed by the IOUs and filed with the Commission via portfolio applications. Projected savings reflect planned program activity prior to program implementation, and they have historically exceeded adopted goals.
- **Utility Reported Savings** - Also referred to as "claims," these are energy savings claimed by the utilities and based on the number of installed technologies and pre-evaluation (*ex ante)* savings assumptions.

- **Evaluated Savings** - Energy savings estimates that represent adjustments to the Utility Reported Savings based on field research of the installations, performance and market conditions gathered during evaluation activities.
- **Gross Impacts** - Energy savings that result from efficiency measures installed / actions taken by utility customers, regardless of whether or to what extent the programs influenced their actions.
- **Net Impacts** - Energy savings directly attributable to the program. Net savings are calculated by subtracting savings by program participants that are estimated to have happened without the program (so called "free ridership") from the gross savings estimate.

The Commission sets IOU energy savings goals based on market potential studies for energy efficiency technologies and programs. The energy savings goals for the 2010-2012 energy efficiency portfolios were originally established in D.04-09-060. In that decision, the Commission adopted savings targets for each of the utilities for the years 2004-2013 that reflect the expectation that energy efficiency efforts in their combined service territories should be able to capture 70% of the economic potential and 90% of the maximum achievable potential for electric energy savings over the 10-year period. Savings goals were defined as cumulative in D.04-09-060, reaffirmed

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1   The goals that are currently in place were adopted in D. 04-09-060; September 23, 2004, were based on the data available at the time; and were considered "stretch goals." http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/40212.pdf

in D.07-10-032, and adjusted to an annual basis in D.09-05-037.

For the 2010-2012 program implementation period, the Commission allowed the utilities to credit savings from Low Income Energy Efficiency programs and Codes and Standards advocacy toward their goals, although these savings were not included in the savings potential study used to define the goals. Looking just at evaluated gross IOU program savings, excluding Codes and Standards advocacy and low income program savings, the statewide goals for electricity and natural gas savings were exceeded by 11 percent and 15 percent, respectively, while the achievement of goals set for demand reduction fell short by 15 percent (Table A-1 Energy Savings for Statewide 2010-2012 Portfolio: Goals, Reported, Evaluated.) With the inclusion of savings from Codes and Standards advocacy and low income programs, the utilities exceeded the statewide 2010-2012 electric gross savings goals by 47 percent; the demand goals by 11 percent; and the natural gas goals by 32 percent.

It is important to acknowledge several challenges associated with a comparison of goals and evaluated savings. Each savings estimate is based on slightly different assumptions and available information in different time periods. The primary difference is that evaluated results reflect newly attained information on energy efficiency market penetration, end user adoption rates, and per unit savings levels developed through on-site evaluations and other research. This information was not available when goals or ex ante savings estimates were established. This leads to differences between the savings estimates assessed after implementation and forecasted savings potential and savings estimates used to develop the efficiency goals.

The following tables present the range of savings estimates including the final evaluated savings in comparison to the savings goals the Commission adopted for the program cycle (2010-2012).

Table A-1 Energy Savings for Statewide 2010-2012 Portfolio: Goals, Reported, Evaluated

		Energy Savings		
		Electric (GWh)	Demand (MW)	Natural Gas (MM Therms)
Goals	Gross	6,966	1,537	150
Reported	Gross	9,167	1,657	155
	Net	6,416	1,177	102
Evaluated	Gross	7,745	1,308	173
	Net	4,923	844	94
Codes and Standards	Net	2,281	343	11
Evaluated Savings Including Codes and Standards		10,026	1,651	184
Low Income	Reported	237	59	14
Evaluated Including C&S and Low Income		10,263	1,710	197
Evaluated Gross Savings V. Goals		111%	85%	115%
Evaluated Gross, C&S and Reported LI V. Goals		147%	111%	132%

Table A-2 2010-2012 Energy Savings PG&E: Goals, Reported, Evaluated

PG&E Energy Savings				
		Electric (GWh)	Demand (MW)	Natural Gas (MM Therms)
Goals		3,110	703	49
Reported	Gross	3,924	703	68
	Net	2,701	487	43
Evaluated	Gross	3,256	553	53
	Net	1,999	345	27
Codes and Standards	Net	1,004	131	(1)
Evaluated Including Codes and Standards	Net(C&S), Gross(Programs)	4,260	684	52
Reported	Low Income	135	34	6
Evaluated Including C&S and Low Income	Net(C&S), Gross(Programs), Low Income (Reported)	4,395	718	59
Evaluated Gross Savings vs. Goals		105%	79%	109%
Evaluated Gross, C&S and Reported LI V. Goals		141%	102%	120%

Table A-3 Reported and Evaluated - SCE

SCE Energy Savings

		Electric (GWh)	Demand (MW)	Natural Gas (MM Therms)
Goals		3,316	727	-
Reported	Gross	4,458	825	-
	Net	3,169	598	-
Evaluated	Gross	3,859	652	-
	Net	2,541	437	-
Codes and Standards	Net	1,042	174	-
Evaluated Including Codes and Standards	Net(C&S), Gross(Programs)	4,901	826	-
Reported	Low Income	78	23	-
Evaluated Including C&S and Low Income	Net(C&S), Gross(Programs), Low Income (Reported)	4,979	849	-
Evaluated Gross Savings V. Goals		116%	90%	
Evaluated Gross, C&S and Reported LI V. Goals		150%	117%	

Table A-4 Reported and Evaluated SCG

SCG Energy Savings

		Electric (GWh)	Demand (MW)	Natural Gas (MM Therms)
Goals		-	-	90
Reported	Gross	-	-	83
	Net	-	-	55
Evaluated	Gross	-	-	111
	Net	-	-	62
Codes and Standards	Net	-	-	12
Evaluated Including Codes and Standards	Net(C&S), Gross(Programs)	-	-	123
Reported	Low Income	-	-	6
Evaluated Including C&S and Low Income	Net(C&S), Gross(Programs), Low Income (Reported)	-	-	129
Evaluated Gross Savings V. Goals				123%
Evaluated Gross, C&S and Reported LI V. Goals				143%

Table A-5 Reported and Evaluated SDG&E

SDG&E Energy Savings

		Electric (GWh)	Demand (MW)	Natural Gas (MM Therms)
Goals		540	107	11
Reported	Gross	786	129	4
	Net	546	92	3
Evaluated	Gross	630	103	9
	Net	383	63	5
Codes and Standards Evaluated	Net	235	39	(0)
Including Codes and Standards	Net(C&S), Gross(Programs)	865	142	9
Reported Evaluated	Low Income	24	2	1
Including C&S and Low Income	Net(C&S), Gross(Programs), Low Income (Reported)	888	144	10
Evaluated Gross Savings V. Goals		117%	96%	80%
Evaluated Gross, C&S and Reported LI V. Goals		165%	134%	89%